

REMARKS

Reconsideration is respectfully requested of the Official Action of August 5, 2004, relating to the above-identified application. The Examiner has rejected claims 1-6, 14, and 15 as being anticipated by Talarico (U.S. Patent 5,951,420), and claims 8-13 and 16-20 as being obvious in view of Talarico. In response, Applicant has amended claims 1, 3, 5, and 11-20, and has further added claims 21 and 22 to the present application. Applicant submits in the following remarks that the amended claims are not obvious in view of the references cited by the Examiner.

Initially, Applicant submits that Talarico describes and claims a composite *safety* baseball or softball that is used for practice or training purposes rather than for play in an actual game. See col. 1, lines 43-47. Because this safety ball of Talarico is designed for practice play, it may be softer than a conventional game ball, and thus has less potential for injury to players and spectators. However, such a design does not provide for the playability and natural feel as desired. As acknowledged in Talarico, col. 1, lines 14-16, its design relates “to balls used for practice or training purposes rather than for play in an actual game.”

To achieve these desired results for a safety ball, Talarico describes the use of a spherical center ball core (2) has a Shore hardness measured by a Shore A durometer of 35-40 degrees (col. 2, lines 9-11). The spherical center ball core is surrounded by an outer layer (4) that has a Shore hardness of 60-65 degrees (col. 2, lines 16-18). Shore hardness is a measure of the resistance of material to indentation by a 3 spring-loaded indenter. If the indenter completely penetrates the material, a reading of 0 is obtained, and if no penetration occurs, a reading of 100

results. As a result, the higher the number of the Shore hardness, the greater the resistance and the harder the material. Consequently, the safety ball as taught and claimed by Talarico requires that the outer layer be harder than the center ball core in order to achieve the desired results for a practice ball. While this design is allegedly safer by having lower impact forces than conventional game balls, it nonetheless teaches against the benefits obtained by Applicant's design.

More specifically, the game ball described in the present application is directed to a ball that is to be used in competitive play rather than a safety ball. The lower compression is produced while also maintaining performance for competitive play and providing the desired durability of the game ball. These benefits are obtained by utilizing a dual core having an outer mantle layer surrounding a central core, wherein the outer layer is softer than the central core to improve the compression of the game ball, and correspondingly the central core retains a hardness to insure the competitive play characteristics of the game ball and to increase the durability of the game ball. This construction is opposite the construction described in Talarico.

Looking now to the claims, Applicant has amended claims 1 and 14 to clarify the structure of the present invention. Specifically, Applicant's game ball has a "soft over hard" construction. By using a softer compression outer core or mantle layer in Applicant's design, the overall compression of the game ball is reduced, thus reducing the bat denting, compression and the like, while maintaining durability and performance needed for an actual game ball. See paragraph 17 of Applicant's specification. Moreover, the softer mantle layer is added to the central core to "control or to change the performance characteristics of the ball and to make it

feel softer yet have many of the desirable characteristics of a traditional softball.” See paragraph 18 of Applicant’s specification. Talarico, on the other hand, does not provide the benefits of the present game ball, and further teaches a game ball having an outer surface that is harder than the inner core. Furthermore, Talarico’s “hard over soft” construction actually teaches away from the Applicant’s invention, in that a hard outer surface for Applicant’s game ball would reduce the durability of the game ball and would potentially dent and damage baseball bats.

Looking to claim 3 and new claim 21, Applicant has recited the specific mixture ratio of polyol to isocyanate that is not described in Talarico. This ratio, as described in paragraph 23 of Applicant’s specification, is desirable to provide the desired compression of the central core while not compromising the durability of the central core. Specifically, this mixture provides a compression between about 350 lbs. and about 550 lbs. While Talarico describes the use of a polyol and an isocyanate, it does not describe the use of a mixture that provides the desired properties in Applicant’s game ball.

Referring to claims 6 and 15, Applicant has further defined the use of a second mantle layer as being a harder than the first mantle layer. By providing a thin, harder outer surface, the game ball has a feeling that is similar to a traditional harder ball while still having a low compression. See paragraph 29 of Applicant’s specification. Although Talarico describes the potential use of an optional third layer of polyester thread wound onto the core layer (Talarico, col. 2, lines 30-35), such construction does not provide the desired results of the second mantle layer described in claims 6 and 15.

Referring now to claims 10, 11, 17, and 18, has included definitions of the size of the center core and first mantle layer used for the present embodiment of a game ball having approximately a 12 inch circumference. As noted, the center core has a diameter of between 3.40 and 3.44 inches, and the first mantle layer would have a thickness of between 0.05 inches and 0.50 inches. These measurements are designed such that the first mantle layer of the game ball will have the desired “softness”, and such that the game ball will, on the one hand, have the desired properties for the comfort of the user, and on the other hand, have the “playability” and natural feel desired by the user.

Moreover, the dimensions of Applicant’s core and mantle layer are significantly different from those taught in Talarico for comparably sized balls. In particular, in claim 10, lines 1-14, Talarico describes a similarly sized safety ball having a circumference of approximately 11 inches. The safety ball of this size has a center core having a diameter of 1.97 inches and an outer spherical layer of thickness of approximately 1.47 inches. Consequently, it is clear that Talarico must have a substantially smaller center core, and a substantially larger mantle layer in order to achieve its desired properties for its safety ball that is only usable for practice or training purposes (as noted in Talarico, col. 1, lines 43-47). In contrast, the game ball described in revised claim 1 is directed to a ball that is to be used in competitive play, and therefore has the recited dimensions of a softer mantle layer surrounding a harder central core. Such dimensions are not taught nor obvious in view of the description in Talarico, and are desired to provide a game ball having the playability and durability properties desired by the Applicant. As a result, Applicant submits that these claims are in condition for allowance.

Finally, new claim 22 provides an additional description of the weight of the central core and the first mantle layer as described in paragraph 31 of Applicant's specification. This weight described in this claim is between approximately 100 grams and 115 grams, which is well over the twice the proposed weight described in Talarico (see Talarico, col. 4, lines 1-5). Moreover, the weight of the first mantle layer defined in this claim is approximately 50 grams, which is substantially less than the preferred weight of 78-82 grams described in Talarico. By having the dimensions described in Applicant's specification and this claim, Applicant's game ball has a greater durability than those previously described while maintaining the COR performance desired.

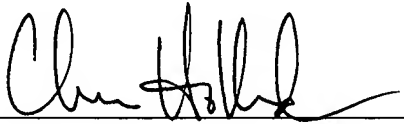
In summary, while Applicant notes that Talarico describes a safety ball having a soft spherical core surrounded by a harder outer layer, Applicant submits that Talarico does not describe the game ball taught in the amended claims, nor are the claims obvious in view of Talarico. The mere possibility that the safety ball of Talarico could potentially be modified to produce the claimed invention does not make the modification obvious unless the prior art suggests the desirability of the modification. In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In the present case, there is no such suggestion.

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In view of the amendments to the claims and the arguments provided, Applicant respectfully submits that the present invention as claimed is not anticipated nor obvious in view of Talarico, and requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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